

REMARKS

Claims 1-11 are pending in this application. Applicant thanks the Examiner for indicating the presence of allowable subject matter in claims 2-10. Claim 11 has been amended. No new matter has been added.

Claim 11 was rejected under 35 USC 112, second paragraph, because the term “correlation coefficient” is allegedly a relative term that renders the claim indefinite. Applicant respectfully traverses this rejection with respect to claim 11, as amended.

Claim 11, as amended, recites a pulse wave measuring apparatus according to claim 1, where the distortion degree calculation unit calculates an index representing the correlating relationship between a sphygmographic waveform detected with the selected sensor element and a sphygmographic waveform detected with the at least one sensor element located at a predetermined distance from the selected sensor element, as the difference in distortion degree. Support for this amendment is found on page 13, lines 1-7 of applicant’s specification. In addition, the index representing the correlating relationship is discussed at page 12, lines 21-28 of the specification as a value that indicates the relationship between a parameter representing the distortion degree and error in the AI value calculated from a pulse wave measured by the sensor right above the artery. Applicant submits that this amendment cures any indefiniteness problem with claim 11 and requests that the rejection be withdrawn.

Claims 1 and 11 stand rejected under 35 USC 102(b) as anticipated by Kawamura U.S. Patent No. 4,561,447. Applicant respectfully traverses this rejection.

Applicant’s claim 1 recites a sphygmographic waveform value calculation unit that calculates a characteristic value, e.g., Augmentation Index (AI) value, from signals output from a selected sensor located above an artery and another sensor located at a predetermined distance from the selected sensor. Noise appears as sensor measurement error through the process of measuring at a site distant from the artery. This noise affects the calculation of the degree of distortion. The distortion degree calculation unit determines how much the amplitude of the

pulse wave of the sensor located above the artery differs from the sensor at a predetermined distance from the selected sensor. The output of the sensor located at a predetermined distance from the site above the artery is corrected based on the degree of distortion.

Applicant submits that the “difference in output from a plurality of sensors” in Kawamura and “distortion” of applicant’s claims differ from each other, as will be described below. Kawamura teaches that the output from a plurality of sensors is used to reduce variations in the pressing force. In other words, the apparatus and method of Kawamura is based on variations in the output from a plurality of sensors due to “variations in pressing force” (noise caused by not being pressed equally), which is an independent factor.

In contrast, the difference in the output from a plurality of sensors in applicant’s claims is explained on page 2, line 26 to page 3, line 4 in the specification. There, applicant describes, with reference to Fig. 16, that, at a region distant from the artery portion that has become flat by the pressing on the artery, blood vessel tension occurs in a direction other than the direction parallel to the leveled region. The resultant of that blood vessel tension and the blood vessel tension in a direction parallel to the leveled region of the artery will affect the blood vessel inner pressure. In other words, “the difference in output from a plurality of sensors” in the subject application is caused by the effect of the resultant force, and is called “sensor signal distortion” in the subject application.


In the subject application, all the outputs from the plurality of sensors correspond to artery information obtained from the artery, and the effect of noise is not taken into account, as in Kawamura. Therefore, the recitation of “the method of defining the degree of distortion is not limited to that described” in the present specification, noted by the Examiner, is not intended to include the method taking the effect of “noise” in to account, as in Kawamura. This becomes apparent from the aforementioned definition of “distortion” in the specification.

Applicant submits that entry of the amendment after final is appropriate here because it places the application in condition for allowance or, in the alternative, in a better form for appeal. Accordingly, applicant solicits early action in the form of a Notice of Allowance.

In the event that the transmittal letter is separated from this document and the Patent and Trademark Office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing Docket No. **163852020800**.

Respectfully submitted,

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